

ABSTRACT OF THE DISCLOSURE

A plurality of switching transistors is provided, each connects power supply terminals of a plurality of first circuit blocks to a power supply line, respectively. Among the first circuit blocks, the power supply terminals of the first circuit blocks operating at different timings are connected by an internal power supply line. A power supply control circuit simultaneously turns on the switching transistors connected to the internal power supply line, in response to operation(s) of at least any one of the first circuit blocks connected to the internal power supply line. Since the switching transistors can be shared among the first circuit blocks not operating simultaneously, operation speed of the first circuit blocks can be increased. Since a total size of the switching transistors can be made small, standby current can be decreased. Accordingly, a semiconductor integrated circuit operating at a high speed can be constituted without increasing the standby current.